I've got the power

"Power only tires those who do not have it."

—Italian Prime Minister Giulio Andreotti, 1919

by Kathy DeLucas

mployees in Building 40 at Technical Area 3 can now state a similar conviction after a successful electrical upgrade project brought building occupants the power and electricity they need to do their jobs. The Electrical Infrastructure and Safety Upgrades Project for that facility was recently completed, ahead of schedule and under budget.

Building 40, a 90,000-square-foot 45 yearold building, houses a significant portion of the Physics (P) and Materials Science and Technology (MST) divisions. The electrical

A time to reflect



by Tom Bowles, chief science officer

realize that there is tremendous concern on the part of everyone at the Laboratory over the upcoming process to rebid the contract to operate Los Alamos. The two concerns that

I hear most often are about how the new contract will impact our ability to do science and how benefits will be affected. On the first issue, the fact that the science and mission part of the draft request for proposals (RFP) has the highest percentage single weight (32.5 percent) of all the components that go into scoring the bids clearly indicates that the National Nuclear Security Administration (NNSA) fully understands the importance of science in delivering on our missions. The message on the issue of benefits is less clear, as the draft RFP is not completely explicit about what will happen to people's benefits, including retirement. While I agree this is a cause for concern, I would like to reassure everyone that you do not have to take immediate action to preserve your benefits or your options. The University of California, the Laboratory, and the community have all provided input to the NNSA about these issues. NNSA is being fully responsive to the concerns being voiced — this [was] clearly evidenced by the decision to extend the period for comment by two weeks.

Ambassador [Linton] Brooks has visited Los Alamos twice in the last few months to meet with [Lab] staff to get direct input on people's concerns. The degree of concern that the staff has over the draft RFP terms was very clearly communicated to [Brooks] during his visit just before Christmas. It is clear to me that he is doing everything possible to ensure that the outcome of the contract rebid is fair and equitable. Thus, I would urge everyone to let the contract process continue to the point where the final RFP is released before making any decisions about the future. You have absolutely nothing to lose by doing that and a lot to gain by having all of the information at hand in making a decision.

upgrades involved the design and installation of a new power distribution system to meet current electrical codes and standards. Electrical safety

hazards, such as

inadequate grounding systems, overloaded branch circuits and outdated electrical equipment, exposed employees and occupants to potential risks such as fires, arc blasts, shock or electrocution hazards. All these deficiencies were corrected through a total replacement of the electrical system within the building.

The project involved 20,000 staff hours — more than 85 percent performed during normal working hours — with zero safety or security incidents. The construction work was strategically planned during the design phase to allow the new power distribution system to be installed in sections, which minimized the occupants' exposure to hazards and the amount of downtime to programmatic and scientific projects. No office was out of service for more than one week.

"The team kept in constant communication with the building occupants so that people could plan their activities according to the construction schedules," said Martin Aguilera, deputy project team leader of Deployed Services (PM-DS).

Although major electrical outages were required to replace the old equipment and wiring, the outages were planned in advance, coordinated with building residents and scheduled for weekends. Some work was done off normal working hours, however, overtime was less than 10 percent of the 20,000 hours worked.

"This represents a major achievement for the Laboratory to be able to perform construction work safely and securely in an occupied facility," Aguilera said.

The EISU Building 40 Project cost a total of \$2.9 million and is only a portion of the larger EISU Project Laboratory-wide \$67 million effort to upgrade electrical power systems in buildings that are old or do not meet current electrical safety codes.

In addition, the EISU Project received a 2004 Pollution Prevention Award for waste minimization. More than 170,000 pounds of construction debris, including conduit, wire and other electrical equipment has been recycled.



Intellectual property

What comprises the Laboratory's intellectual property? Intellectual property (IP) includes the inventions, discoveries, software, drawings and technical know-how of Laboratory staff.

Why should employees protect the Lab's intellectual property?

The Laboratory's ability to use the results of its own scientific research and to effectively meet its congressionally mandated technology transfer mission depends on how well it protects its IP. Patents and copyrights provide an inflow of royalties from licenses and funds from industrial partnerships. A portion of this income is distributed to innovators as well as to their divisions. Division royalty funds can be used for research, education, or research and development activities. When employees accept a position with the Laboratory, they agree to report any patentable device, process, or product discovered during their Laboratory employment (see "Patents" under the Policy Index at int.lanl.gov/policies/policy_index/index.shtml).

How do I know if my work should be protected?

A patent is granted for an original idea. The idea may be an invention (utility patent), a new ornamental design for an article of manufacture (design patent) or a distinct and new variety of plant (plant patent). In general, the Lab's IP is subject to a utility patent in one of the following classes:

- ullet Process a defined series of steps performed to change the nature or characteristics of a material, composition or article
 - Machine a group of elements or parts interacting to produce a given effect
 - Article of manufacture almost anything produced by a human
 - Composition of matter a chemical compound or mixture of ingredients
 New and useful improvements on the preceding classes of inventions

What is the criteria for "patentability"?

• Novelty — An invention must not have been described in any form of publication, placed in use or offered for sale — even by the inventor — more than one year before the date of the patent application.

continued on Page 7